

1. PERFORMANCE

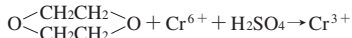
- 1) Measuring range : 20-500 ppm
Number of pump strokes : 1 (100mℓ)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 5 ppm
- 4) Shelf life : 2 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Graduations printed on the tube are calibrated by Methyl alcohol at 1 pump stroke and 1,4-Dioxane concentration is determined by using a conversion chart.
- 8) Colour change : Yellow → Pale blue

2. RELATIVE STANDARD DEVIATION

RSD-low : 15 % RSD-mid. : 10 % RSD-high : 10 %

3. CHEMICAL REACTION

Chromium oxide is reduced.



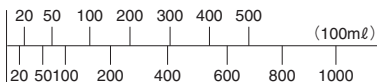
4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | Coexistence |
|---|---|----------------------------|
| Alcohols FIG.1 | Similar stain is produced. | Higher readings are given. |
| Esters FIG.2 | | ∕ |
| Aliphatic hydrocarbons (more than C ₃) | Whole reagent is changed to Pale brown. | ∕ |
| Aromatic hydrocarbons | ∕ | ∕ |
| Ketones | ∕ | ∕ |
| Halogenated hydrocarbons | ∕ | ∕ |

1,4-Dioxane concentration (ppm)



No. 119U Tube reading (ppm)

TEMPERATURE CORRECTION TABLE

| Tube Readings (%) | Corrected Concentration (%) | | | | |
|-------------------|-----------------------------|---------------|---------------|---------------|----------------|
| | 0 °C (32 °F) | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 500 | 700 | 600 | 500 | 470 | 440 |
| 400 | 480 | 440 | 400 | 370 | 350 |
| 300 | 370 | 330 | 300 | 280 | 260 |
| 200 | 250 | 220 | 200 | 190 | 170 |
| 100 | 130 | 110 | 100 | 90 | 85 |
| 50 | 65 | 60 | 50 | 45 | 40 |
| 20 | 25 | 23 | 20 | 18 | 15 |